

## ABSTRACT

### “A MICRO-ADJUSTABLE TOOL CHUCK”

A micro-adjustable tool chuck comprises a first cylindrical body member  
5 (1) adapted for connection to a drive spindle, a second cylindrical body member  
(2) adapted to receive a tool bit in the end thereof, and moveable axially relative to  
the first body member (1), and means for drivingly connecting the first body  
member (1) to the second body member (2). A first screw thread (10) is formed  
10 on the outer surface of the first body member (1) and a second screw thread (11) is  
formed on the outer surface of the second body member (2). The first screw  
thread (10) is of a greater pitch (coarser) than the second screw thread (11). An  
outer sleeve (12) is provided around the first and second body members (1,2),  
which outer sleeve (12) defines a third screw thread (13) on the inner surface  
thereof at one end which engages with the said first screw thread (10) on the first  
15 body member (1) and a fourth screw thread (14) on the inner surface thereof at the  
opposite end which engages with the second screw thread (11) on the second body  
member (2) such that rotation of the outer sleeve (12) in one direction causes the  
first and second body members (1,2) to move axially towards each other and  
rotation of the outer sleeve (12) in the opposite direction causes the first and  
20 second body members (1,2) to move axially away from each other.

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